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EXAMINER	
MOHAMED, ABDEL A	

ART UNIT	PAPER NUMBER
1653	

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/926,679	IKEDA ET AL.	
	Examiner	Art Unit	
	Abdel A. Mohamed	1653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 January 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8 and 10-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 10-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

ACKNOWLEDGMENT OF AMENDMENT, REMARKS AND STATUS OF THE CLAIMS

1. The amendment and remarks filed 1/28/04 are acknowledged, entered and considered. In view of Applicant's request claims 1, 2, 4 and 6-8 have been amended, claim 9 has been canceled and claims 10-17 have been added. Thus, claims 1-8 and 10-17 are now pending in the application. The objections to the specification and title, the rejections under 35 U.S.C. 101, 35 U.S.C. 112, second paragraph and 35 U.S.C. 103(a) over the prior art of record are withdrawn in view of Applicant's amendment and remarks filed 1/28/04. However, the rejection under 35 U.S.C. 112, first paragraph is maintained for the reasons of record.

CLAIMS REJECTION-35 U.S.C. 112 1st PARAGRAPH.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-8 and newly submitted claims 10-17 remain rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for pharmaceutical formulations of cyclic lipopeptide compound I *in* vitro combination with amphotericin B (AMPH-B), itraconazole (ITCZ), Nikkomycin X, and flucytosine (5-FC) against *Aspergillus* fumigatus which were examined macroscopically for growth and

compared to control (no drug). MIC was visually determined as the lowest concentration resulting in prominent decrease in turbidity compared to controls, does not reasonably provide enablement for a method of treatment or inhibition of the infectious diseases caused by the fungal pathogen (as listed in claim 6), by administering an effective amount of a lipoprotein compound I in combination with azoles, polyene, purine nucleotide inhibitor, pyrimidine nucleotide inhibitor, protein elongation factor inhibitor, bactericidal/permeability inducing protein product or polyoxin, to a pharmaceutical formulations thereof for the prophylactic and/or therapeutic treatment of all kinds of the infectious diseases caused by the fungal pathogen as claimed in claim 8 and newly submitted claim 10, and the various acyls as recited in newly submitted claims 12-15, the various aroyl groups recited in newly presented claim 16 and the various benzoyl substitution as recited in newly submitted claim 17. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

In this regard, the application disclosure and claims have been compared *per* the factors indicated in the decision *In re Wands*, 8 USPQ2 1400 (Fed. Cir., 1988) as to undue experimentation. The factors include:

1) the nature of the invention;

2) the breadth of the claims;

3) the predictability or unpredictability of the art;

4) the amount of direction or guidance presented;

5) the presence or absence of working examples;

6) the quantity of experimentation necessary;

7) the state of the prior art; and

8) the relative skill of those skilled in the art;

Each factor is addressed below on the basis of comparison of the disclosure, the claims and state of the prior art in the assessment of undue experimentation.

1) the nature of the invention;

The instantly claimed invention is directed to a method of treatment or inhibition of the infectious diseases (as listed in claim 10) caused by the fungal pathogen (as listed in claim 6) and by administering an effective amount of a lipoprotein compound I in combination with azoles, polyene, purine nucleotide inhibitor, pyrimidine nucleotide inhibitor, protein elongation factor inhibitor, bactericidal/permeability inducing protein product or polyoxin including all the various acyls, aroyl and benzoyl substitutes and to a pharmaceutical formulation thereof.

2) the breadth of the claims;

The scope of the claims include a method for treatment or inhibition of the infectious diseases caused by all kinds of fungal pathogens comprising administering an effective amount of lipopeptide compound I in combination with azoles such as fluconaze, voriconze, itraconazole, miconazole, ER 30346, SCH 56592; polyenes such as amphotercin B, nystatin or liposomal and lipid forms thereof such as Abelcet, AmBisome and Amphocil; purine or pyrimidine nucleoside inhibitors such as flucytosine; or polyoxins such as nikkomycins or other chitin inhibitors, elongation factor inhibitors

such as sordarin and analogs thereof, mannan inhibitors such as predamycin, bactericidal/permeability-inducing(BPI) protein products such as XMP.97 or XMP.127 or complex carbohydrate antifungal agents such as CAN-296 in combination with a pneumocandin derivatives, etc. pharmaceutical formulations thereof as claimed in claims 1-8 and 10-17. The specification does not disclose one reasonable method for making and using the claimed invention that bears a reasonable correlation to the entire scope of the claims. The specification lacks guidance/direction as to how to employ a pharmaceutical preparation useful for treatment or inhibition of the infectious diseases as recite din claim 10 caused by the fungal pathogen selected from the fungi recited in claim 6 by administering an effective amount of a lipopeptide compound I in combination with any or all of the drugs recited above in the manner claimed in claims 1-8 and 10-17.

Further, the first paragraph of 35 U.S.C. 112 requires, inter alia, that a patent specification provide sufficient guidance to enable a person skilled in the art to make and use the claimed invention without undue experimentation. In re Vaeck, 947 F.2d 488, 495, 20 USPQ2d 1438, 1444 (Fed. Cir. 1991). While patent Applicants are not directed to disclose every species that falls within a generic claim, id. At 496, 20 USPQ2d at 1445, it is well settled that "the scope of the claims must bear a reasonable correlation to the scope of the enablement provided by the specification". In re Fisher, 427 F.2d 833, 839, 166 USPQ 18, 24 (CCPA 1970).

3) the predictability or unpredictability of the art;

As acknowledged by Applicant on pages 2-3 in the instant specification under Background Art, that the claimed lipopeptide compound I have shown potent *in vivo* activity against some opportunistic mycotic infections such as *Candida, Pneumocystis carinii and Aspergillus;* however, the present uses, i.e., polyenes, such as amphotercin B, cause severe side effects and azoles, such as fluconazole, are only fungistatic. Further, in view of the fact as stated in the instant specification on page 11, lines 31 to page 12, lines 4, that the fungi recited (claimed in claim 6) are well known to cause various infection disease in skin, hair, oral mucosal, gastrointestinal tract, bronchus, lung, endocardium, brain, meninges, urinary organ, vaginal portion, oral cavity, ophthalmus, systemic, kidney, heart, external auditory canal, bone, nasal cavity, paranasal cavity, spleen, liver, hypodermal tissue, lymph duct, gastrointestine, articulation, muscle, tendon, interstitial plasma cell in lung, and so on and the various infectious diseases recited in claim 10. Furthermore, there is no drug interaction and efficacy studies conducted with the lipopeptide compound I in combination with the various drugs claimed to rule out the side effects acknowledged by Applicant. Thus, clearly showing the unpredictable nature of compounds in the method of treatment claimed.

4) the amount of direction or guidance presented;

The specification teaches pharmaceutical formulations of cyclic lipopeptide compound I *in* vitro combination with amphotericin B (AMPH-B), itraconazole (ITCZ), Nikkomycin X, and flucytosine (5-FC) against *Aspergillus* fumigatus which were examined macroscopically for growth and compared to control (no drug). MIC was

visually determined as the lowest concentration resulting in prominent decrease in turbidity compared to controls as shown in Test Method on page 13 and Test Results of pages 14 and 15.

5) the presence or absence of working examples;

The instant specification does not teach for a method of treatment or inhibition of the infectious diseases (as listed in claim 10) caused by the fungal pathogen (as listed in claim 6), by administering an effective amount of a lipoprotein compound I in combination with azoles, polyene, purine nucleotide inhibitor, pyrimidine nucleotide inhibitor, protein elongation factor inhibitor, bactericidal/permeability inducing protein product or polyoxin, and to a pharmaceutical formulations thereof for the prophylactic and/or therapeutic treatment of the all kinds of the infectious diseases caused by the fungal pathogen as claimed in claim 8. Thus, Applicant's teachings do not adequately explain the evidence of making and using claimed lipopeptide compound I in combination with the various drugs recited in the claims for a method of treatment or inhibition of all kinds of infectious diseases caused by the various fungal pathogens because there are no working examples or data or evidences in the instant specification substantiating the above making and using the claimed lipopeptide compound I in combination with all kinds of antifungal agents for the method claimed in the instant invention; except for protocols.

6) the quantity of experimentation necessary;

The claimed invention is directed to a method of treatment or inhibition of the infectious diseases (as listed in claim 10) caused by the fungal pathogen (as listed in

claim 6), by administering an effective amount of a lipoprotein compound I in combination with azoles, polyene, purine nucleotide inhibitor, pyrimidine nucleotide inhibitor, protein elongation factor inhibitor, bactericidal/permeability inducing protein product or polyoxin, and to a pharmaceutical formulations thereof for the prophylactic and/or therapeutic treatment of all kinds of the infectious diseases caused by the fungal pathogen as claimed in claim 8. Thus, in view of the broad diversity of fungal pathogens which encompass any kind of fungus of animals and humans, in view of the fact that animals and humans are out bread, in view of the fact that the antifungal agents have potentially adverse side effects as acknowledged on page 2 in the instant specification, in view of the fact that the instant invention lacks working example(s) for the claimed method, and in view of the recognized problems in the art that the claimed fungal pathogens are well known to cause the various infectious diseases recited on pages 11-12 in the instant specification; a reasonable doubt exist as to the enablement of the claimed method for treatment or inhibition of the infectious diseases caused by all kinds of fungal pathogens in all kinds of animals including humans by administering an effective amount of lipopeptide compound I in combination with the various antifungal agents in the manner claimed in claims 1-8 and 10-17. The claims are based on pure speculation that claimed method and pharmaceutical formulations thereof would be effective. Therefore, undue experimentation is necessary to determine if and under what conditions, the claimed invention as broadly claimed is enabled, since all kinds of pharmaceutical formulation comprising the various antifungal agents in combination with lipopeptide compound I in a method of treatment or inhibition of all kinds of diseases

caused by fungal pathogens in an animal including human are contemplated and are encompassed as well as wide range of situations. The results desired appear to be highly dependent on all variables, the relationship of which is not clearly disclosed. Hence, one of ordinary skill in the art would not be able reproduce all the aspects the claimed invention pharmaceutical formulations as well as methods for treatment or inhibition of all kinds of infectious diseases caused by all kinds of fungal pathogens, as encompassed in the claims would be effective and under what conditions.

7) the state of the prior art;

Thus, in view of the above and in view of the fact that the state of the prior art as admittedly acknowledged by Applicant on page 2 that the present uses, i.e., polyenes, such as amphotericin B, cause severe side effects and azoles, such as fluconazole, are only fungistatic. Hence, one of skill in the art would not accept the characterization of any and all therapeutic treatment protocols without working example(s) or data or evidence a believable on their face.

8) the relative skill of those skilled in the art;

Therefore, applying the Wands factors to the facts of this case, one of skill in the art would find that undue amount of experimentation would be required to practice the full scope of the extremely broad claims fro the reasons given above. Thus, in view of the quantity of experimentation necessary, the lack of adequate guidance or working examples or data, and the breadth of the claims; the claims are not commensurate in scope with the enabling disclosure. Hence, in consideration of each of factors 1-8, it is apparent that there is undue experimentation because of variability in prediction of

outcome that is not addressed by the present application disclosure, examples, teachings, and guidance presented. Therefore, absent of factual data to the contrary, the amount and level of experimentation needed is undue. Accordingly, filing of evidence commensurate with the scope of the claims or amendment of the claims to what is supported by the enabling disclosure is suggested.

ARGUMENTS ARE NOT PERSUASIVE

CLAIMS REJECTION-35 U.S.C. 112 [1st] PARAGRAPH.

3. The rejection of claims 1-8 and newly submitted claims 10-17 under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for pharmaceutical formulations of cyclic lipopeptide compound I *in* vitro combination with amphotericin B (AMPH-B), itraconazole (ITCZ), Nikkomycin X, and flucytosine (5-FC) against *Aspergillus* fumigatus which were examined macroscopically for growth and compared to control (no drug). MIC was visually determined as the lowest concentration resulting in prominent decrease in turbidity compared to controls, does not reasonably provide enablement for a method of treatment or inhibition of the infectious diseases caused by the fungal pathogen (as listed in claim 6), by administering an effective amount of a lipoprotein compound I in combination with azoles, polyene, purine nucleotide inhibitor, pyrimidine nucleotide inhibitor, protein elongation factor inhibitor, bactericidal/permeability inducing protein product or polyoxin, to a pharmaceutical formulations thereof for the prophylactic and/or therapeutic treatment of all kinds of the infectious diseases caused by the fungal pathogen as

claimed in claim 8 and newly submitted claim 10, and the various acyls as recited in newly submitted claims 12-15, the various aroyl groups recited in newly presented claim 16 and the various benzoyl substitution as recited in newly submitted claim 17. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

Applicant's arguments filed 1/28/04 have been fully considered but they are not persuasive. Applicant has argued that all of the embodiments of antifungal agents of the present claims of widely differing chemical types are **known** antifungal agents, including the lipopeptide of the formula (I), and as such the ways and means of formulating compositions containing these compounds into effective pharmaceutical compositions is well known and established. Further, all of the compositions disclosed have been tested against various fungal organisms as has been shown. Clearly, in view of what is known about the treatment of fungal organisms with known antifungal compositions, one of skill in the art, having the present specification in-hand, would be readily able to formulate composition embodiments within the scope of the present claims that would be effective against various types of fungal organisms. Applicant continues by stating that while there may be some one or few fungal strains that may not be readily treatable with the present composition in comparison to others, such examples do not negate the present invention. Moreover, it is clear that in view of what is known in the prior art and what is described in the present specification, that no undue experimentation would be involved by one of skill in the art in determining how a

given composition is to be formulated and tested for antifungal activity and effectiveness. Such experimentation is well within the capability of the skilled artisan. Applicant concludes by stating that the specification provides a full disclosure of the invention with respect of how to make and use the invention, and as such, the claims are, in fact, fully enabled by the specification as originally filed, and that the requirements of the first paragraph of 35 U.S.C. § 112 have been met is not persuasive.

Contrary to Applicant's arguments, the claims are not directed to composition claims that exhibit pharmaceutical activities, i.e., formulated and tested for antifungal activities and effectiveness as argued. Rather, the claims are directed to a method for the treatment or inhibition of an infectious diseases (claim 1), in particular those diseases as recited in claim 10, or a pharmaceutical composition for the prophylactic and/or therapeutic treatment of an infectious disease caused by a fungal pathogen (claims 6-8) by administering therapeutically effective amounts of the compounds of claims 1-5 and 11-17. Further, the specification does not disclose one reasonable method for making and using the claimed invention that bears a reasonable correlation to the entire scope of the claims. The specification lacks guidance/direction as to how to employ a pharmaceutical preparation useful for treatment or inhibition of the infectious diseases as recite din claim 10 caused by the fungal pathogen selected from the fungi recited in claim 6 by administering an effective amount of a lipopeptide compound I in combination with any or all of the drugs recited above in the manner claimed in claims 1-8 and 10-17.

With respect to Applicant's arguments that all of the embodiments of antifungal agents of the present claims of widely differing chemical types are **known** antifungal agents, including the lipopeptide of the formula (I), and as such the ways and means of formulating compositions containing these compounds into effective pharmaceutical compositions is well known and established. Further, all of the compositions disclosed have been tested against various fungal organisms as has been shown. Clearly, in view of what is known about the treatment of fungal organisms with known antifungal compositions, one of skill in the art, having the present specification in-hand, would be readily able to formulate composition embodiments within the scope of the present claims that would be effective against various types of fungal organisms is unpersuasive. Contrary to above statement, Applicant has argued in the instant application on page 12, paragraph 2, of the remark under the rejection of U.S.C. 103(a) filed 1/18/04 that the cited reference ('782) has deficiencies in making a brief general statement that the compound is useful in the treatment of a subject infected with other classes of fungal pathogens, but no data of significance is provided showing the efficacy of the compound other than *Candida albicans* in an *in vitro* study. Thus, this statement clearly indicates that it is necessary to provide therapeutic evidence or data to support treatment and/or prevention claims. Further, as stated above, Applicant acknowledges that there may be some one or few fungal strains that may **not** be as readily treatable with the present composition in comparison to others, and on page 2-3 in the instant specification Applicant admittedly acknowledge under Background Art, that the claimed lipopeptide compound I have shown potent *in vivo* activity against some opportunistic

mycotic infections such as *Candida, Pneumocystis carinii and Aspergillus;* however, the present uses, i.e., polyenes, such as amphotercin B, cause severe side effects and azoles, such as fluconazole, are only fungistatic. Further, in view of the fact as stated in the instant specification on page 11, lines 31 to page 12, lines 4, that the fungi recited (claimed in claim 6) are well known to cause various infection disease in skin, hair, oral mucosal, gastrointestinal tract, bronchus, lung, endocardium, brain, meninges, urinary organ, vaginal portion, oral cavity, ophthalmus, systemic, kidney, heart, external auditory canal, bone, nasal cavity, paranasal cavity, spleen, liver, hypodermal tissue, lymph duct, gastrointestine, articulation, muscle, tendon, interstitial plasma cell in lung, and so on and the various infectious diseases recited in claim 10. Furthermore, there is no drug interaction and efficacy studies conducted with the lipopeptide compound I in combination with the various drugs claimed to rule out the side effects acknowledged by Applicant. Thus, clearly showing the unpredictable nature of the compounds in the method of treatment claimed.

The claimed invention is directed to a method of treatment or inhibition of the infectious diseases (as listed in claim 10) caused by the fungal pathogen (as listed in claim 6), by administering an effective amount of a lipoprotein compound I in combination with azoles, polyene, purine nucleotide inhibitor, pyrimidine nucleotide inhibitor, protein elongation factor inhibitor, bactericidal/permeability inducing protein product or polyoxin, and to a pharmaceutical formulations thereof for the prophylactic and/or therapeutic treatment of all kinds of the infectious diseases caused by the fungal pathogen as claimed in claim 8. Thus, in view of the broad diversity of fungal

pathogens which encompass any kind of fungus of animals and humans, in view of the fact that animals and humans are out bread, in view of the fact that the antifungal agents have potentially adverse side effects as acknowledged on page 2 in the instant specification, in view of the fact that the instant invention lacks working example(s) for the claimed method, and in view of the recognized problems in the art that the claimed fungal pathogens are well known to cause the various infectious diseases recited on pages 11-12 in the instant specification; a reasonable doubt exist as to the enablement of the claimed method for treatment or inhibition of the infectious diseases caused by all kinds of fungal pathogens in all kinds of animals including humans by administering an effective amount of lipopeptide compound I in combination with the various antifungal agents in the manner claimed in claims 1-8 and 10-17. The claims are based on pure speculation that claimed method and pharmaceutical formulations thereof would be effective. Therefore, undue experimentation is necessary to determine if and under what conditions, the claimed invention as broadly claimed is enabled, since all kinds of pharmaceutical formulation comprising the various antifungal agents in combination with lipopeptide compound I in a method of treatment or inhibition of all kinds of diseases caused by fungal pathogens in an animal including human are contemplated and are encompassed as well as wide range of situations. The results desired appear to be highly dependent on all variables, the relationship of which is not clearly disclosed. Hence, one of ordinary skill in the art would not be able reproduce all the aspects the claimed invention pharmaceutical formulations as well as methods for treatment or

inhibition of all kinds of infectious diseases caused by all kinds of fungal pathogens, as encompassed in the claims would be effective and under what conditions.

Thus, in view of the above and in view of the fact that the state of the prior art as admittedly acknowledged by Applicant on page 2 in the instant specification that the present uses, i.e., polyenes, such as amphotericin B, cause severe side effects and azoles, such as fluconazole, are only fungistatic. Hence, one of skill in the art would not accept the characterization of any and all therapeutic treatment protocols without working example(s) or data or evidence a believable on their face. The burden lies with Applicant to provide sufficient objective factual evidence that the claimed invention does indeed work *in vivo* to treat all kinds of infectious disease caused by a fungal pathogen without causing or exhibiting any side effects after prolonged treatment in a patient and particularly in human is fraught with unpredictability and uncertainty because for the reasons discussed above.

Therefore, for the reasons discussed above, Applicant's teachings do not adequately explain the evidence of making and using claimed lipopeptide compound I in combination with the various drugs recited in the claims for a method of treatment or inhibition of all kinds of infectious diseases caused by the various fungal pathogens because there are no working examples or data or evidences in the instant specification substantiating the above making and using the claimed lipopeptide compound I in combination with all kinds of antifungal agents for the method claimed in the instant invention; except for protocols. Applicant should present some data or authorative reference to establish the successful use of all the compounds in treating or inhibiting or

preventing all kinds of infectious diseases caused by all kinds of pathogenic fungus in the manner claimed in the instant invention in order to fulfill 35 U.S.C. 112, first paragraph requirement. Secondly, the Examiner has clearly shown in the previous Office Action of Paper No. 6 (mailed 11/13/03) and as discussed above that without guidance through working example(s), one of ordinary skill in the art would not predict from background discussion and/or information and protocols to employ or administer the pharmaceutical formulation in therapeutically effective composition in the manner claimed. Thus, the specification does not enable any person skilled in the art to which it pertains, or which it is most nearly connected, to use the invention commensurate in scope with the claims. In the express absence of one or more examples, evidence and sufficient guidance, the skilled artisan would be faced with undue experimentation for practicing the invention. Thirdly, it is not understood from Applicant's response how the instant invention, which Applicant considers as novel and inventive, be exemplified without working example(s) or data or evidence. The law requires that a disclosure in an application shall inform those skilled in the art how to use Applicant's alleged discovery, not how to find out how to use it for themselves. See *In re Gardner et al.*, 166 USPQ 138 (CCPA 1970). Therefore, undue experimentation is necessary to determine if and under what conditions, the claimed invention as broadly claimed is enabled. Hence, it is viewed that the specification does not enable the invention as claimed in claims 1-8 and 10-17, as it does not teach how to use the invention to achieve the function of the claims for the reasons discussed above. Thus, applying the Wands factors to the facts of this case, one of skill in the art would find that undue

amount of experimentation would be required to practice the full scope of the extremely broad claims for the reasons given above. Hence, in view of the quantity of experimentation necessary, the lack of adequate guidance or working examples or data, and the breadth of the claims, the claims are not commensurate in scope with the enabling disclosure. Accordingly, filing of evidence commensurate with the scope of the claims or amendment of the claims to what is supported by the enabling disclosure is again suggested.

The following is a new ground of rejection necessitated by Applicant's amendment:

CLAIMS REJECTION-35 U.S.C. 112, 2nd PARAGRAPH

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claim 2 recites the limitation "wherein said compound" in line 1. There is insufficient antecedent basis for this limitation in claim 1 and claim 2, and it is not clear whether the limitation reflects lipopeptide compound (I) or to other compound. Appropriate clarification is required.

Claim 11 recites the limitation "wherein the pharmaceutically acceptable salt of the lipopeptide compound (I)" in lines 1 and 2. There is insufficient antecedent basis for this limitation in claim 1 and claim 11.

ACTION IS FINAL, NECESSITATED BY AMENDMENT

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

CONCLUSION AND FUTURE CORRESPONDENCE

6. No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdel A. Mohamed number is (703) 308-3966. The examiner can normally be reached on Monday through Friday from 7:30 a.m. to 5:00 p.m. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low, can be reached on (703) 308-2923. The appropriate fax phone number for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 305-7401 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196

Mohamed/AAM

April 16, 2004

CHRISTOPHER S. F. LOW
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600